Attachment B

Response to Comments
from Heal the Bay and Santa Monica Baykeeper received on October 21, 2004.

(Tentative NPDES Permit for Hyperion Treatment Plant)

Thank you for your comments on the above-referenced WDR and NPDES permit. The following are the United States Environmental Protection Agency (USEPA) and the Los Angeles Regional Water Quality Control Board (Regional Board) responses to your comments provided on October 21, 2004.

Antibacksliding Provisions and Reasonable Potential Analysis

1. **Comment:** *In the Hyperion Tentative, the Regional Water Quality Control Board, Los Angeles Region (Regional Board) and the U.S. Environmental Protection Agency (EPA) seek to relax effluent limitations for certain discharges form the Hyperion Plant. The EPA and Regional Board state that this relaxation falls under an exception to the general antibacksliding provisions found in Sections 303(d)(4) and 402(o) of the Clean Water Act (CWA). (Hyperion Tentative at Finding 42.)*

   The antibacksliding provisions found in the CWA generally require a reissued permit to be as stringent as the previous permit. (33 U.S.C. 1313(d)(4); 33 U.S.C. 1342(o).) Six exceptions to the antibacksliding provisions allow the permitting authority to relax effluent limitations (33 U.S.C. 1342(o)(2).) For example, if the permitting authority finds material or substantial alterations to a facility, the authority can depart from previous effluent limitations if the authority determines that such a departure is justified. (33 U.S.C. 1342(o)(2)(A).) Another exception allows for a departure when the EPA Administrator in her judgment determines that legal or technical mistakes were made when issuing the previous permit. (33 U.S.C. 1342(o)(2)(B)(ii).)

   In the Hyperion Tentative, EPA and the Regional Board cite an exception that allows for a departure from a prior permit's limitations when new information is available that would have justified the application of a less stringent effluent limitation at the time of the prior permit's issuance. (33 U.S.C. 1342(o)(2)(B)(i).) In invoking this exception, EPA and the Regional Board conducted a "Reasonable Potential Analysis" (RPA) by examining new data concerning the concentration of particular constituents in the Hyperion Plant's discharge effluent. Based on this new information, the EPA and the Regional Board found that these constituents do not have, and did not have, the reasonable potential to cause or contribute to excursions above water quality standards. The EPA and the Regional Board concluded that this new information make the WQBELs currently in force legally unnecessary.

   Assuming no mistakes in either fact or law, the EPA and Regional Board might be correct in the determination that the law "no longer requires" WQBELs for these constituents. (See Hyperion Tentative at Finding 42) However, the more import question presented is whether such a relaxation in the effluent limitation is sound public policy for the water body in the period to be governed by the new permit.

   The question before the Regional Board and EPA is whether it makes sense to relax the standard now in light of (1) the likelihood that such a standard will be necessary later in

permit period and (2) the current WQBEL posing no additional burden to the Hyperion Plant. As the Regional Board is aware, stormwater and nuisance runoff in the City of Los Angeles is high in metals. The City has expressed its intent to divert this metal-laden runoff and stormwater to the Hyperion Plant in the near future as a compliance measure for various Total Maximum Daily Loads (TMDLs). Thus, it may not be rational to conclude that the quality of Hyperion's discharge is "expected to remain relatively constant or improve during this permit term." (Hyperion Tentative at Finding 57.) Moreover, due to the de-listing of Santa Monica Bay for metals in 2002, the public cannot rely on other protections from metal discharges to the Bay besides the permit currently under consideration.

Given the likely increase in metals in the Hyperion Plant's discharge, the absence of burden on the permitted facility, and the lack of other authorities protecting the public, it makes little sense to use the Regional Board's or EPA's discretion to relax the effluent limitations at this time. In addition, due to the controversy over RPA, the State Water Board recently postponed a final decision on an amendment to the Ocean Plan that specifically addressed these issues. The current Ocean Plan does not contain a provision on the use of RPA for WQBEL determination.

One possible suggestion that RWQCB and the EPA should consider is the addition of specific language in the permit that addresses situations where Hyperion discharges effluent that exceeds the Ocean Plan Table B objective multiplied by the dilution factor (13 for the one mile outfall and 86 for the five mile outfall). In these circumstances, the permit should require the RWQCB to add a WQBEL for that constituent at a public hearing. Currently, the NPDES permit is silent on what occurs when a Table B objective multiplied by the dilution factor is exceeded. On page 50-VI-A. The permit mentions that the permit can be reopened and modified, to incorporate new limits based on future RPA to be conducted based on on-going monitoring data collected by the Discharger and evaluated by the Regional Board and EPA. However, the permit is silent on the issue of what happens when the high effluent concentrations previously described occur.

Response: USEPA and the Regional Board followed procedures described and documented in the Tentative Permit Fact Sheet and Findings to evaluate reasonable potential and establish whether or not water quality based effluent limits (WQBELs) for the Hyperion Treatment Plant (HTP) were necessary. This undertaking was conducted on a pollutant-by-pollutant basis for all Ocean Plan Table B toxics following NPDES regulations at 40 CFR 122.44(d)(1) and using conservative statistical procedures for evaluating reasonable potential recommended in USEPA's *Technical Support Documents for Water Quality-based Toxics Control* (USEPA, 1991; TSD). For pollutants where reasonable potential was not established, antibacksliding provisions under Clean Water Act Section 402(o) generally prohibit the relaxation of established WQBELs except where specific exceptions are met. In this case, because the new information exception under Section 402(o)(2) was met, the Tentative Permit proposed removal of a number of toxics WQBELs contained in the 1994 permit. Although the commenter questions the wisdom of this relaxation, the Regional Board and USEPA have followed proper regulatory procedures in making this change, including rigorous statistical examination of large effluent data sets. Moreover, we believe that the Tentative Permit contains adequate safeguards, in the form of strict concentration-based effluent performance goals for toxic pollutants without WQBELs that will signal changes in effluent quality, along with prescribed follow-up investigatory actions should performance-based concentrations be exceeded. Because our reasonable potential evaluation so conservatively estimates effluent variability and

corresponding projections of worst-case effluent quality, and because proposed concentration-based effluent performance goals are calculated using current treatment plant performance data, we do not expect exceedances of Table B objectives for toxic pollutants without WQBELs during the coming permit term. However, the permit contains permit reopener provisions allowing modification of the permit to include WQBELs when new information demonstrates such conditions are necessary to protect water quality standards (e.g., Tentative Permit Provisions VI.A, F, etc.). We believe the reopener provisions in this section of the permit are sufficient and that the addition of a new provision requiring the addition of a WQBEL if certain conditions occur is not necessary. USEPA and the Regional Board have followed a water quality based permitting approach that is consistent with Ocean Plan requirements and NPDES regulations. This permit contains a system for limiting, monitoring, and evaluating changes in effluent quality and mass emissions to best protect water quality in Santa Monica Bay.

Modification: No permit provisions have been changed in response to this comment.

The Draft Permit Is Currently Missing Essential Compliance and Plant Performance Information

2. **Comment:** *In order to provide a thorough review of Hyperion's permit, more information needs to be provided to the public. The permit does not include a compliance summary in the findings. Did Hyperion exceed any effluent limits over the life of the permit? If so, which limits were exceeded? Did RPA lead to the elimination of WQBELs for any pollutants with effluent limits that were exceeded over the course of the previous permit? Were there any performance goals that were exceeded? If so, for which pollutants and how frequently?*

   Also, the permit did not include a summary of influent water quality and effluent water quality over the life of the permit (only effluent water quality for 2003). A year by year summary of influent and effluent water quality with average and maximum concentrations would be very useful in determining how well the City's pretreatment program has been working and how well Hyperion has been treating the wastewater. Also, it would give the public a better idea of the status and trends for influent and effluent water quality at Hyperion.

   The EPA and the RWQCB provided a thorough table on RPA, and a table on allowable MLs for ocean dischargers. However, the permit did not include a list of MLs that Hyperion currently uses for all Table B constituents. This is an essential piece of information to determine if Hyperion MLs exceed Ocean Plan Table B objectives (for constituents other than the stated DDT, PCBs, chlordane, and PAHs) and to determine if more WQBELs are needed to protect beneficial used in the receiving waters. Also, the information is needed to determine if lower MLs need to be achieved for constituents of concern (TCDD equivalents, dieldrin, etc.).

   Response: We agree that public agencies should strive to summarize and communicate complex information in ways that facilitate public understanding of the important issues at hand, and, for that reason, have included detailed historical performance information in the Tentative Permit Fact Sheet which should meet these needs. Tables R1 and R2 of the Fact Sheet provided copious detailed information for pollutants monitored in the HPT discharge, from January 1999 through June 2004 when full secondary treatment was achieved. Not only are these effluent data statistically summarized and compared to Ocean Plan Table B

objectives to determine compliance with water quality standards, but individual month-by-month effluent concentrations and detection limits achieved by the permittee are also presented. We note that pollutants with effluent or detection limits directly exceeding applicable Ocean Plan Table B objectives following initial dilution will receive a WQBEL in this permit, unless additional information demonstrates that the pollutant does not have reasonable potential to exceed applicable water quality standards. We are hopeful that permit standardization efforts under development in California will facilitate these types of communications.

Based on our review of effluent data during the reporting period, there have been no performance goal exceedances, except for ammonia. Exceedances of ammonia performance goal were caused by the treatment of returned centrate containing elevated ammonia concentrations (ammonia concentrations increased from approximately 800 mg/L to 1250 mg/L) generated by HTP's newly implemented thermophilic digestion process in January 2003, and the control oxidation of ammonia to avoid any potential for partial oxidation of ammonia to nitrite in the final effluent. The higher level of nitrite in the final effluent will dramatically increase the concentration of BOD. However, current ammonia levels are consistently below the effluent limit of 51 mg/L (ammonia as N) prescribed in the 1994 permit.

Modification: No permit provisions have been changed in response to this comment.

The Use of Performance Goals, Mass Emission Caps and Mass Emission Benchmarks Needs to Be Clarified

3. **Comment:** *The draft permit does not adequately explain the use of performance goals, mass emission caps, and mass emission benchmarks. The permit does explain the rationale for development of each of these values and the permit states that these values are not limits and are not enforceable. The permit also states that these goals, caps and benchmarks are essential to help insure improving plant performance and that effluent quality and loading won't backslide over time. However, the permit does not explain how these goals, caps and benchmarks will help insure that effluent water quality will not backslide or cause degradation of receiving water quality. Also, the permit does not explain why all three categories are needed. What does a goal provide that a benchmark or cap does not? What happens in the event that a benchmark, cap or performance goal is exceeded once or a number of times? Why are performance goals and mass emission caps in the permit while the benchmarks are in the monitoring plan? Shouldn't they all be in the permit? Please provide a clearer explanation on how these values will be utilized to insure that effluent quality continues to improve at Hyperion.*

   In 1994, the Santa Monica Bay Restoration Plan (SMBRP) was approved and it contained recommendations on the need for a mass-emissions approach to controlling pollutants in the Bay. The list of pollutants of concern included the following: PAHs, Chlordane, Cadmium, Chromium, Copper, Lead, Nickel, Silver, Zinc, nutrient, TSS, and trash and debris. The approach was recommended because the existing concentration-based regulatory compliance approach still resulted in sediment contamination hotspots as well as poor water quality due to non-point sources and stormwater. The Hyperion permit set mass emission caps for copper, lead, silver and zinc, but it does not set caps for cadmium, chromium, and nickel. Please provide the rationale for not including these metals under the mass emission caps.

Mass emission benchmarks are set for numerous Table B constituents. Unlike mass emission caps which are listed in pounds per year, the benchmarks are listed in metric tons per year. These should be consistent. Also, the mass emission caps were set at 1995 emission rates while the benchmarks were set using average effluent concentrations from 1999 to 2004 with a flow rate of 400 MGD. Why are these two methods so different? Why was a less protective methodology used to determine benchmarks? Why was 400 MGD used as the flow for determining the benchmarks when the current average flow is 315 MGD? (Avg. flow in to Hyperion in 339 MGD and 24 MGD goes to West Basin Water Reclamation Facility for further treatment.) Currently, growth projections do not justify the use of 400 MGD for the calculations, especially considering West Basin MWD's plans to increase water reuse in the area.

Performance goals were determined as monthly average. Why weren't there performance goals for daily and instantaneous maximums? How do the performance goals correspond to mass emission caps and benchmarks? Please clarify.

Response: The Tentative Permit proposes both concentration-based and mass-based numerical performance values for Ocean Plan Table B toxic pollutants in the HTP discharge. This two pronged approach is not unique. NPDES effluents are generally restricted using both concentration and mass (see Response #1). Moreover, in the context of water quality based permitting, it has long been understood that concentration- and mass-based requirements are complementary, focusing on the control of water column toxicity and pollutant loadings into the receiving water system.

In the Tentative Permit, concentration-based effluent performance values are called "performance goals". These monthly values were developed using HTP effluent data from 1999 to 2004 and are statistically calculated to represent the upper bound of treatment plant performance for these toxics. Exceedances of a goal will result in follow-up investigatory actions by the permittee, and the potential for additional permit controls found necessary to protect water quality, in accordance with applicable State and federal requirements. In the Tentative Order, they are presented in the table with other effluent quality discharge requirements reported on a regular basis to the Regional Board and EPA, in order to highlight the fact that more immediate follow-up actions by the permittee may be required based on monitoring results for the specified reporting period.

In the Tentative Permit, mass-based performance values are generally called "mass emission benchmarks". These values were developed using the concentration-based effluent performance goals described in the previous paragraph and the permittee's projected end-of-permit effluent flow of 400 mgd, consistent with the approach used in other federal permits issued to Southern California Bight dischargers. They are historically expressed as an annual average, in metric tons. At minimum, an exceedance of these projected end-of-permit threshold values will trigger the need for an antidegradation analysis at the time of permit reissuance. USEPA notes that mass emission benchmark values have been historically presented in the monitoring and reporting programs of other federal permits issued to Southern California Bight dischargers to emphasize that these values are not effluent limits and to facilitate reporting and referencing by biologists reviewing ambient monitoring data generated under the permit. We also wish to clarify with the commenter that together the Order and Monitoring and Reporting Program, with their attachments, comprise the NPDES permit.

In conjunction, we are clarifying here that the "mass emission benchmarks" for copper, lead, silver and zinc are not calculated in the manner just described. Rather, they are calculated based on recommendations in the Santa Monica Bay Restoration Plan (SMBRP) for establishment of an initial performance goal in the form of caps for these four metals at 1995 loading levels (i.e., 1995 effluent concentrations and flow). For consistency, Section D, Mass Emission Benchmarks, of the draft monitoring and reporting program expresses the recommended SMBRP mass emissions caps for these four metals in metric tons per year, consistent with the other mass emission benchmark values. Because the SMBRP did not further recommend mass emission caps for cadmium, chromium and nickel in later documents or meetings, the "cap" values for these three metals were not included in the Tentative Permit.

Modification: No permit provisions have been changed in response to this comment.

Miscellaneous Permit Issues

4. **Comment:** *Finding 24 on atmospheric deposition is not pertinent to the permit. Please delete.*

   Mercury in locally caught pelagic fish is a health concern. The long awaited NOAA/EPA study on local fish contamination should shed further light on this issue. Please explain how staff considered this issue in determining that WQBELs and mass emission caps weren't needed for mercury.

   Response: The Regional Board and USEPA wish to clarify that this finding simply provides Santa Monica Bay aerial deposition study results which indicate aerial deposition is a significant contributor to the overall pollutant loading of trace metals to the Santa Monica Bay. The Regional Board did not use the conclusions of this study as the basis for setting mass emission caps proposed in the Tentative Permit. Rather, the mass emission caps proposed by the Tentative Permit are based on recommendations in the Santa Monica Bay Restoration Plan that 1995 actual loading levels be established for copper, lead, silver, and zinc. Because our reasonable potential evaluation did not project exceedances of Ocean Table B objectives for mercury, WQBELs were not proposed in the permit (see Tables R1 and R2). However, the Tentative Permit contains a concentration-based effluent performance goal for mercury that is more stringent than the Ocean Plan objectives and corresponding mass emission effluent limits that would have otherwise been applicable to the discharge. We understand that as additional information is collected on environmental effects and regulatory levels and control programs for mercury are developed and implemented at federal and State levels, permit requirements for mercury in the HTP discharge may be revised.

   Modification: No permit provisions have been changed in response to this comment.

Monitoring Concerns

5. **Comment:** *In 2002 and 2003, Heal the Bay participated in Regional Board and discharger-led efforts to coordinate NPDES monitoring in Santa Monica Bay. Regretfully, those efforts ceased in 2003, and the Hyperion monitoring requirements in this permit are the first Bay monitoring recommendation that we've seen in well over a year. Both Heal the Bay and the*

Santa Monica Baykeeper strongly urge the City of Los Angeles, the RWQCB and the EPA to set up a monitoring meeting to discuss the program with the environmental community as soon as possible.

Response: USEPA and Regional Board staff agree that it will be beneficial to discuss the monitoring program requirements with the City, the environmental community and others to develop an optimal program combining compliance monitoring with the regional monitoring needs of Santa Monica Bay. Therefore, USEPA and the Regional Board have consulted with the Santa Monica Bay Restoration Commission and determined that its Technical Advisory Committee is willing to develop detailed study designs for the various monitoring components needed to complete the comprehensive monitoring program for Santa Monica Bay. This will provide a forum for all interested parties to provide comments and suggestions. Upon completion of this task, USEPA and the Regional Board will develop an implementation plan to fund these new monitoring program components. We anticipate that funding will be provided through a combination of NPDES discharger participation and linkages to non-regulatory monitoring programs by resource agencies, universities and other organizations.

Modification: Section I.L. of the monitoring and reporting program has been modified as follows:

L. The conceptual framework for the SMBRP Comprehensive Monitoring Program was designed to be implemented in part through modifications to existing receiving water monitoring programs for major NPDES dischargers into coastal ocean waters. Some elements of this monitoring program already have been implemented, for example through establishment of periodic bightwide regional monitoring surveys (Bight94, Bight98 and Bight03) and annual kelp bed monitoring. However, other elements of the program have yet to be developed, including:

-rocky intertidal monitoring
-resident fish monitoring
-pelagic ecosystem monitoring
-wetlands monitoring
-hard bottom benthos monitoring
-bird and mammal monitoring
-commercial shellfish monitoring
-stormwater mass emission loading and plume tracking monitoring.

~~The City of Los Angeles (Hyperion Treatment Plant) hereby is required to help establish and participate in the Santa Monica Bay Monitoring Consortium as a condition of this permit. The goal of this Monitoring Consortium will be to oversee development and implementation of the regional monitoring surveys required to complete the SMBRP Comprehensive Monitoring Program. The Monitoring Consortium shall be comprised of representatives from coastal and inland dischargers, as well as other interested parties. It is expected that each discharger will contribute only towards implementation of those monitoring components that are applicable to their discharge. The goal is to implement these surveys by the summer of 2005.~~

~~The City of Los Angeles shall be responsible for developing a workplan, in conjunction with other consortium participants and interested stakeholders, outlining the monitoring surveys proposed to complete the SMBRP Comprehensive Monitoring Program. This workplan shall be submitted by March 31, 2005, for approval by the Executive Officer. The Monitoring Consortium also shall develop a funding mechanism to implement the recommended monitoring surveys. It is anticipated that funding will be supplied through financial contributions provided by NPDES dischargers. An effort will be made to offset these costs through reductions in existing monitoring requirements, if possible.~~

The Santa Monica Bay Restoration Commission's Technical Advisory Committee has agreed to develop a detailed workplan outlining the monitoring surveys required to complete implementation of the Comprehensive Monitoring Program framework developed in 1993. This workplan should include formulation of management goals and objectives, identification of suitable monitoring indicators, detailed sampling designs, and cost estimates for each monitoring component. Upon completion of this workplan, the United States Environmental Protection Agency and the Los Angeles Regional Water Quality Control Board will develop an implementation plan to fund this program. It is anticipated that funding will be supplied through a combination of modifications, including redirection of existing effort and/or imposition of new requirements, to the Monitoring and Reporting Programs of the City of Los Angeles' Hyperion Treatment Plant and other NPDES dischargers into Santa Monica Bay and linkages to existing programs performed by other agencies or interested parties.

6. **Comment:** *Heal the Bay and the Baykeeper commend the RWQCB and the EPA for finally attempting to address the need for a baywide comprehensive monitoring program as recommended in the SMBRP. The requirement to develop a monitoring consortium to develop and implement regional monitoring surveys by 2005 is long overdue. We look forward to working with you in this endeavor. However, the recommended monitoring framework is long on theme and intent and short on detail. For example, the requirement for annual special studies is put off for a later date. The discharger will submit suggestions for special studies annually for the regulatory community to approve. The requirement is vague and we have no idea what sorts of studies will be required, or the scope of these studies. Also, the monitoring framework includes an assumption that we strongly disagree with: "each discharger will contribute towards implementation of those monitoring components that are applicable to their discharge". The discharger is already getting the benefit of a reduced monitoring program. This limitation will insure that SMBRP recommended comprehensive monitoring plan components such as wetlands, rocky intertidal, hard bottom benthos, etc., won't be adequately monitored in the near future. Please remove this assumption on page T-6.*

   Response: The Regional Board and USEPA have been working for the past several years to implement the SMBRP's recommendations for comprehensive monitoring of Santa Monica Bay. Establishment of the Bightwide Regional Surveys (1994, 1998 and 2003), the Central Region Kelp Consortium, the Central Bight Water Quality Cooperative Group and the Santa Monica Bay Bacteriological Monitoring Program have allowed us to implement many facets of this monitoring program. However, we agree that several monitoring components remain to be addressed. As addressed in the preceding response Santa Monica Bay Restoration Commission's Technical Advisory Committee will be charged with

developing a detailed workplan for these monitoring elements and the Los Angeles Regional Board and USEPA will develop an implementation program which will include discharger participation, as well as linkage to existing programs performed by other agencies or interested parties.

The Model Monitoring Program guidance recognizes a need for core monitoring, regional monitoring and special studies. It envisions that special studies will be focused on refined questions regarding specific effects or development of monitoring techniques and are anticipated to be of short duration and/or small scale. Questions regarding effluent or receiving water quality, discharge impacts, ocean processes in the area of the discharge, or development of techniques for monitoring the same, arising out of the results of core or regional monitoring, may be pursued through special studies. These studies are by nature ad hoc and cannot typically be anticipated in advance of the five-year permit cycle.

The intent of section K.3 is to establish an annual planning process to discuss the need for special studies and the scope of such studies. In consultation with USEPA and the Regional Board, the City may propose one or more special studies or no special studies for the following year; the City also may propose multi-year special studies, if appropriate. USEPA and Regional Board staff believe that it is essential to allow public participation and input into the design of such studies, thus the requirement to discuss the proposed special studies at a Regional Board hearing prior to approval for implementation.

Modification: Section I.K.3. of the monitoring and reporting program has been modified as follows:

> **3.** Special studies are focused on refined questions regarding specific effects or development of monitoring techniques and are anticipated to be of short duration and/or small scale*,* although multiyear studies also may be needed. Questions regarding effluent or receiving water quality, discharge impacts, ocean processes in the area of the discharge, or development of techniques for monitoring the same, arising out of the results of core or regional monitoring, may be pursued through special studies. These studies are by nature ad hoc and cannot be typically anticipated in advance of the five-year permit cycle.
>
> The ~~scope of each special study shall be determined by the~~ Discharger*,* ~~in coordination with~~ the Regional Board and USEPA shall consult annually to determine the need for special studies. Each year, the Discharger shall submit proposals for *any proposed* special studies to the Regional Board and USEPA by ~~September~~ December 30, for the following year's monitoring effort (July through June). The following year, detailed scopes of work for proposals, including reporting schedules, shall be presented by the Discharger at a Spring Regional Board meeting, to obtain the Regional Board and USEPA approval and to inform the public. Upon approval by the Regional Board and USEPA, the Discharger shall implement its special study or studies.

Influent and Effluent Monitoring

7. Comment: *Heal the Bay and the Baykeeper support the influent and effluent monitoring requirements. The constituents list and the frequency of monitoring seem reasonable. Also, the acute and chronic toxicity monitoring requirements appear protective. We are*

strongly supportive of the new, clearer trigger for initiation of a Toxicity Reduction Evaluation (2 exceedances out of 6 in supplemental accelerated monitoring). However, please clarify in 4c on page T-32 and subsequent related sections that Toxicity Identification Evaluations must be completed as part of the TRE process. In order to successfully perform a TRE, a TIE must be completed. Postponing a TIE until step 3 of a TRE will not provide regulators or the discharger with clear answers on the cause of toxicity.

Response: The existing language contained in the Monitoring and Reporting Program is consistent with the USEPA *Regions 9 and 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs* and with the *Toxicity Evaluation Guidance for Municipal Wastewater Treatment Plants* [EPA/833B—99/002, August 1999]. A TRE is a site-specific study conducted in a stepwise process to narrow the search for effective control measures for effluent toxicity. TREs can vary widely in complexity, ranging from simply changing housekeeping procedures to conducting toxicity identification evaluations. EPA recommends a generalized process, consisting of six tiers, for performing a TRE.

- Tier I includes the acquisition of available data and facility specific information. The available information can usually be divided into three categories: regulatory information, effluent and influent monitoring data, and facility information.
- Tier II evaluates general housekeeping, optimization of treatment plant operation, and the selection and use of process treatment chemicals as a means of reducing final effluent toxicity.
- If the efforts of Tiers I and II do not reduce effluent toxicity to acceptable levels, then Tier III, a TIE is initiated.

Modification No Monitoring and Reporting Program provisions have been changed in response to this comment.

Receiving Water Monitoring

8. Comment: *Before E. coli can be used as a surrogate for fecal coliforms, Hyperion needs to complete a study to determine what percentage of fecal coliform in their treated effluent is E. coli. A description of this study and a timeframe for completion needs to be included in the monitoring program. Also, determination of the fecal coliform:E. coli ratio should be conservative and error on the side of protecting public health and Rec-1 beneficial uses.*

Response: Finding G of the permit addresses the need for Hyperion to conduct a study and obtain Executive Officer approval prior to relying upon E. coli as a surrogate for fecal coliforms. The Los Angeles Regional Board and USEPA are not requiring the City to adopt this change in technique, therefore it is the City's responsibility to develop a workplan and perform any studies needed to support any request for such a change.

Modification: No monitoring and reporting program provisions were changed in response to this comment.

9. Comment: *Again, Heal the Bay and the Baykeeper would be extremely appreciative to meet with the discharger and the regulatory community to get a summary of how the receiving water monitoring program has changed and the rationale for those changes. For example, we assume the array of water quality stations to be sampled and the frequency of sampling by the CTD profiler has changed from the current permit, but no rationale is*

provided for these changes. The same questions arise from the monitoring requirements for sediments, benthos, and fish. Ideally, all the receiving water, sediment and biological monitoring data from the previous permit would have been analyzed before the EPA and the RWQCB recommend modifications in the current monitoring program. Clearly, it makes sense to modify the program now that Hyperion is at full secondary treatment, but the basic questions on the impact of Hyperion on receiving water quality, biota and sediment quality still remain. Also, the monitoring program should provide the information necessary to determine how going to full secondary treatment has changed these parameters over time and space.

Response: Although the Hyperion permit has not been renewed since 1994, several elements of the monitoring program have been changed over the past ten years. The water quality program was changed in 1998 with the formation of the Central Bight Water Quality Cooperative Group. The sampling program was modified to allow coordinated sampling at a series of water quality transects throughout a large portion of the Southern California Bight; four major dischargers (Orange County Sanitation Districts, County Sanitation Districts of Los Angeles County, City of Los Angeles, City of Oxnard) conduct CTD monitoring during the same two to three day period each quarter, providing a better snapshot of water quality conditions within the Bight than was obtained by the previous sampling program.

The benthic sampling program was revised in 1999 at the City's request following the discharge of full secondary treated effluent into Santa Monica Bay near the end of 1998. The Regional Board and USEPA approved a shift from an equidistant, depth contour-based grid of stations to a combination fixed station/random station array. This sampling design was expected to better assess subtle changes in the benthic community as a result of the changes from partial secondary to full secondary effluent. The new monitoring array provides increases sensitivity to any changes resulting from implementation of full secondary treatment, the ability to provide statistical estimates of areal characteristics of the macrofaunal community and for sediment chemistry within the outfall area, elimination of scientifically unnecessary replication, elimination of artificially imposed depth effects and elimination of stations that do not provide meaningful information to the monitoring program.

Modification: No monitoring and reporting program provisions have been changed in response to this comment.

10. **Comment:** *In light of the public health risks of consuming white croaker and EPA's efforts to reduce these risks, we strongly recommend modification of the bioaccumulation monitoring requirements (page T-45). White croaker should replace the hornyhead turbot as the species to be monitored for bioaccumulation trends. We've been told that from agencies working on the Palos Verdes shelf DDT and PCB-related issues that white croaker was not difficult to catch as part of the contaminated fish survey still underway. To make this more feasible, we would support the use of composites of only five croakers to assess status and trends. We support conceptually the design of the local seafood survey except for the lack of pelagic fish such as mackerel. We recommend the addition of a pelagic fish component (mackerel perhaps, but ask the EPA Superfund or OEHHA staff for their recommendation) because of mercury contamination concerns?*

Response: The Regional Board and USEPA agree with the value of bioaccumulation monitoring with white croaker. That is why the croaker is one of the species included in the

Local Seafood Safety Survey to be conducted every other year. No pelagic species have been included in these biennial surveys, since previous monitoring has suggested that demersal species present a greater human health risk in Santa Monica Bay. However, a broader spectrum of fish species, including pelagic species such as mackerel, will be monitored every ten years.

The hornyhead turbot was selected to monitor local bioaccumulation trends, rather than white croaker, because this species lives directly on the bottom (and would have more direct exposure to contaminated sediments). In addition, the hornyhead turbot also is a member of a flatfish guild (several species that occupy a similar ecological niche) that occurs throughout Southern California Bight coastal waters at a variety of depths, allowing this data to be used for regional comparisons.

Modification: No monitoring and reporting program provisions have been changed in response to this comment.

11. **Comment:** *Heal the Bay and the Baykeeper support the inclusion of requirements for the City of Los Angeles to participate in regional predator risk surveys and kelp bed monitoring requirements. Again, we'd like to participate in the final design and recommendations for these programs. The Baykeeper, in particular, has extensive kelp bed monitoring experience and we're concerned that aerial overflights alone are not adequate to answer monitoring questions on the health of kelp beds. Spatial extent characterization is important, but it is certainly not comprehensive.*

Response: The Santa Monica Bay Restoration Project recommended aerial overflights as a suitable method for monitoring long-term trends and overall health of kelp beds. The Central Region Kelp Consortium, chaired by the County Sanitation Districts of Los Angeles County, developed and implemented a discharger-funded monitoring program based on quarterly aerial overflights to monitor kelp beds in Santa Monica Bay, on the Palos Verdes Peninsula and off the coast of Orange County. This program was patterned after a similar program developed by ocean dischargers within the jurisdiction of the San Diego Regional Board. The 2003 survey results have been published in a report to the Central Region Kelp Consortium. Heal the Bay and the Santa Monica Baykeeper are welcome to review and comment on this report.

A Regional Predator Risk Survey was conducted as part of Bight'98. The results were published by SCCWRP in a 2003 report. Heal the Bay and the Santa Monica Baykeeper are welcome to review and comment on that report. The Regional Predator Risk Survey was modified for Bight'03. Those results should be available for review and comment in 2005.

Modification: No monitoring and reporting program provisions have been changed in response to this comment.